

REMARKS/ARGUMENTS

Status of Claims

Claims 1-3, 7, 9, and 19-35 stand rejected.

Claims 2, 3, and 35 are currently amended.

As such, claims 1-3, 7, 9, and 19-35 are currently pending in the application.

The Applicant hereby requests further examination and reconsideration of the presently claimed application.

Claim Rejections – 35 U.S.C. § 102

Claims 1, 2, 7, 9, 19, and 25-35 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 7,042,837 (*Cassiday*). Claims 2 and 19 depend from independent claim 1, claims 9 and 25-33 depend from independent claim 7, and claim 35 depends from independent claim 34. Thus claims 1, 2, 7, 9, 19, and 25-35 stand or fall on the application of *Cassiday* to independent claims 1, 7, and 34. According to MPEP § 2131, “[a] claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” The Applicant respectfully asserts that *Cassiday* fails to teach each and every element of independent claims 1, 7, and 34, and consequently fails to anticipate claims 1, 2, 7, 9, 19, and 25-35.

Cassiday fails to anticipate claims 1, 2, 7, 9, 19, and 25-35 because *Cassiday* fails to teach a first relationship between a data packet identifier and a destination port in a first table and a second relationship between the destination port and a transmitting port in a second table. Claims 1, 7, and 34 read:

1. A method comprising:
 - receiving a data packet comprising a data packet identifier;
 - identifying a destination port corresponding to the data packet identifier from a first routing table, wherein there is **a first relationship between the data packet identifier and the destination port in the first routing table**; and
 - transmitting the data packet via a transmitting port corresponding to the destination port based on **a second relationship between the destination port and the transmitting port in a second routing table**, wherein the transmitting port is used to transmit other data packets regardless of whether a failure is associated with the destination port.
7. A network device, comprising:
 - a processor;
 - a first routing unit; and
 - a second routing unit,wherein the processor is configured to communicate with the first routing unit and the second routing unit,
 - wherein the first routing unit is configured to save **a first relationship between a data packet identifier and a destination port in a first routing table**, and identify the destination port corresponding to the data packet identifier from the first routing table after receiving a data packet, and
 - wherein the second routing unit is configured to save **a second relationship between the destination port and a transmitting port in a second routing table**, and transmit the data packet via the transmitting port corresponding to the destination port based on the second relationship.
34. A device comprising:
 - a first routing unit configured to save **a first relationship between a data packet identifier and a destination port in a first routing table**; and
 - a second routing unit configured to save **a second relationship between the destination port and a transmitting port in a second routing table**.

(Emphasis added). As shown above, claims 1, 7, and 34 require a first relationship between a data packet identifier and a destination port in a first table and a second relationship between the destination port and a transmitting port in a second table. For ease of understanding, the first table and the second table are, as an example, summarized in the below tables:

FIRST TABLE

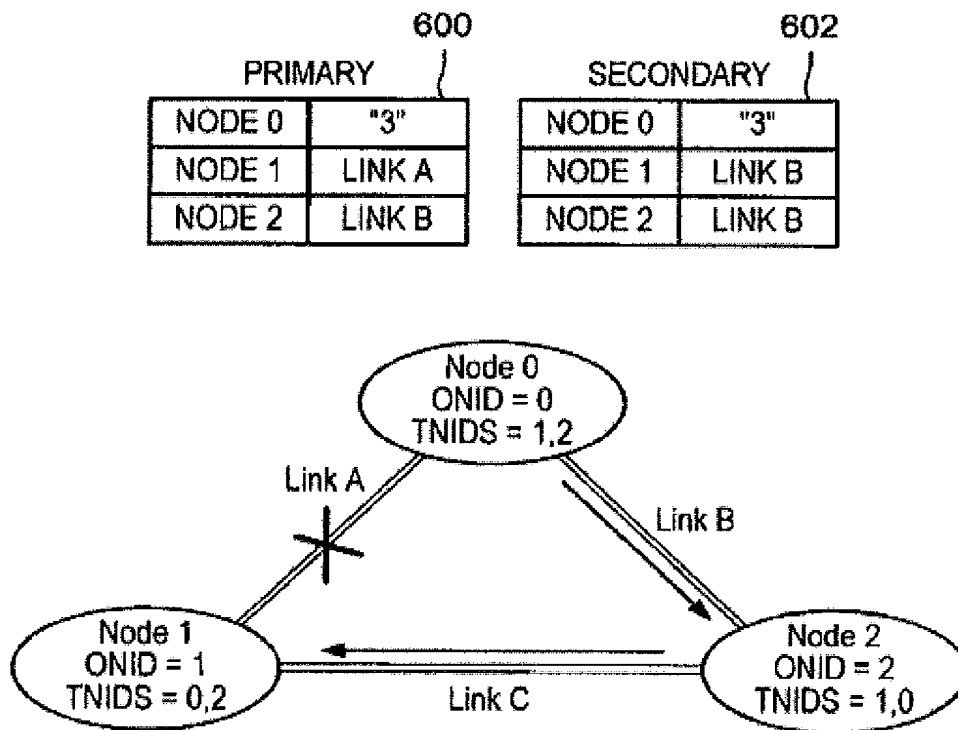
data packet identifier	destination port
------------------------	------------------

SECOND TABLE

destination port	transmitting port
------------------	-------------------

As described in the specification and recited in the claims, after receiving the data packet having a data packet identifier, the destination port corresponding to the data packet identifier is identified based on the first relationship between the packet data identifier and the destination port in the first table. The data packet is then transmitted via a transmitting port corresponding to the destination port based on the second relationship between the destination port and the transmitting port in the second table.

In contrast, *Cassiday* discloses methods and apparatus for enabling the continued, real-time, transmission of data packets in a data network when a link in the network has failed. *See Cassiday*, col. 1, ll. 61-64. As shown in *Cassiday's* FIG. 6, when his primary link fails, a secondary link is selected for transmitting the packet data:



Cassiday, FIG. 6 (partial). *Cassiday's* table 600 and table 602 shown above are the primary route table and the secondary route table, respectively, for his Node 0:

FIG. 6 shows the structure of failover route tables in accordance with one embodiment of the present invention. **Each node has a primary and secondary route table. Each table is made up of n rows and two columns**, where n is the number of nodes in the network (or a realm of the network). Referring to the above example, the failover route tables for Nodes 0, 1, and 2 are shown. **Table 600 is the primary table and table 602 is the secondary table for Node 0**, table 604 and 606 are the primary and secondary routing tables for Node 1, and table 608 and table 610 are the primary and secondary routing tables for Node 2. In the described embodiment, **the first column in any of the tables contains TNIDs of all the nodes**. The TNID of an incoming FOP is used to index this table[.] In the example, there is a total of three entries for three nodes in this column, including an entry for the current node. **In the primary table, the second column contains the primary or "first choice" link to be used for a corresponding node**. For example, for sending a packet to Node 0 from Node 1, Node 1's primary routing table instructs that for Node 0, Link A should be used. Similarly, **Node 0's primary route table indicates that Link A should be used for sending data to Node 1. For sending data to Node 2, Link B should be used**. The entry for the current node itself contains a specially designated value that means "local" or "no route." Such a value indicates that the local node is the target node for that FOP, or that there is no route to the destination node from the current node.

Secondary table 602, for example, is used if the link indicated in the primary route table is a failed link. Thus, originally when Node 0 was going to send a packet to Node 1, the primary route table indicated that it should use Link A. Since Link A had failed, Node 0 checked its secondary route table and determined that the alternative link to get the packet to Node 1 is Link B which gets the packet to Node 2 first (although the fact that it is using Node 2 is irrelevant to Node 0). **Once at Node 2, its routing tables are used in the same manner. Since Link C had not failed, it did not need to search its secondary table**. This is done for as many multihop nodes as needed to ensure that the packet reaches its originally intended termination node. Regardless of how the failover routing is configured (a failover path can have any number of hops) there will always be a case where the primary route table will point to the link on which the packet arrives for at least one failing link case.

Cassiday, column 8, lines 17-58 (emphasis added). As shown above, *Cassiday's* primary route shows the relationship **between the TNIDs of all the nodes and the primary link to be used for transmitting packet data**. **The secondary route table shows the relationship between**

the TNIDs of all the nodes and the secondary link to be used for transmitting packet data when the primary link has failed. If the primary link has not failed, the secondary route table does not need to be queried. In contrast, the first table in claim 1 shows the relationship between the packet data identifier and the destination port. The second route table shows the relationship between the destination port and the transmitting port. After receiving the data packet having a data packet identifier, the destination port corresponding to the data packet identifier is the identifier from the first table. The data packet is transmitted via a transmitting port corresponding to the destination port based on the second table. Thus, the primary route table and the secondary route table can not be the claimed first table and the second table. Therefore, *Cassiday* fails to teach a first relationship between a data packet identifier and a destination port in a first table and a second relationship between the destination port and a transmitting port in a second table. As such, *Cassiday* fails to teach at least one element of independent claims 1, 7, and 34, and consequently fails to anticipate claims 1, 2, 7, 9, 19, and 25-35.

Claim Rejection – 35 U.S.C. § 103

Claims 3 and 20-24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Cassiday* in view of U.S. Patent Application Publication 2005/0099983 (*Nakamura*). Claims 3 and 20-24 depend from independent claim 1. Independent claim 1 is allowable for the reasons given above, thus claims 3 and 20-24 are also allowable.

Finality of Next Office Action

The Applicants would like to point out that claims 1, 7, 9, and 19-34 have not been amended. In addition, the Applicants would like to remind the Examiner of the rules regarding finality of office actions. Specifically, MPEP § 706.07(a) states that the next office action should not be final if the Examiner changes the grounds of rejection for any of claims 1, 7, 9, and 19-34.

Should the Examiner insist on making the next office action final and include new grounds of rejection for any of claims 1, 7, 9, and 19-34, the Applicants request a telephone conference with the Examiner and the Supervisory Patent Examiner to clarify the finality issue, and thereby potentially avoid a petition under 37 C.F.R. § 1.181.

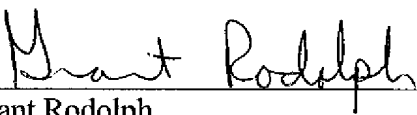
CONCLUSION

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by the Applicant. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Office Action dated February 17, 2010 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account Number 50-1515 of Conley Rose, P.C., Texas. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,
CONLEY ROSE, P.C.

Date: 4/27/10


Grant Rodolph
Reg. No. 50,487

5601 Granite Parkway, Suite 750
Plano, TX 75024
(972) 731-2288
(972) 731-2289 (Facsimile)

ATTORNEY FOR APPLICANT